

REMARKS

Claims 1 –5 have been rejected as being anticipated under 35 U.S.C. 102(b) by *Fuhrman* (U.S. Pat. No. 5,745,837). Applicant respectfully traverses these rejections and/or deems them overcome for at least the following reasons. Reconsideration of this application is thus respectfully requested.

Amendment After Final

Entry of this Amendment is respectfully requested on the ground that this Amendment places the application in condition for allowance. Alternatively, entry of this Amendment is respectfully requested on the ground that this amendment places the claims in better form and condition for appeal. Furthermore, Applicant submits that any changes made to the claims herein do not require an additional search on the part of the Office, nor do any amendments made herein raise new issues with regard to the patentability of the claims now pending.

Rejection based on 35 U.S.C. § 102 (b)

Anticipation under 35 U.S.C. § 102 requires the cited art teach every aspect of the claimed invention. See, *M.P.E.P.* §706.02(a). In other words, "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." See, *M.P.E.P.* §2131 citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Claim 1

Claim 1 has been amended without prejudice to recite, in part, “said at least one intelligent device including an RF splitter suitable for distributing said modulated single frequency RF signal into at least an IP signal portion and the non-IP RF modulated signal, and at least one modulator electrically connected to said RF splitter and suitable for modulating at least the IP signal portion split by said RF splitter.” Support for this Amendment may be found in the detailed description at least with respect to the discussion of Figure 3. Applicant respectfully submits that Fuhrman fails to at least teach, or disclose, the claimed splitter and modulator functioning with respect to the IP and non-IP signals.

In support of the rejections, Examiner relies upon Figure 55 and column 38, lines 48 – 52 of Fuhrman to support the proposition that “the up/down converter then translates the frequency of the downstream signal to the appropriate frequency to avoid interfering with either the CATV television programming channels and the upstream data coming from the CPEs.” Applicant respectfully submits that Fuhrman fails to teach at least the above-identified limitations.

Applicant submits Fuhrman teaches at column 8, lines 47 – 50:

Modulator/transmitter 16 converts the digital data in the data stream arriving on bus 14 into amplitude modulations of a carrier signal by partial matrix multiplication similar to that done by modulator/transmitter 12 using a second code

Fuhrman further teaches the digital data input stream arriving on bus 14 is like the digital data stream arriving on bus 10. *See, e.g., col. 8, lines 40-45.* With regard to these data streams, Fuhrman teaches:

To utilize these mathematical relationships of FIGS. 2 and 3A and convert them into a practical digital data communication system, symbolized by the system of FIG. 1, subscriber #1 provides a digital input stream of symbols or bits using any input device or computer (not shown). This digital data stream to be transmitted to the head end arrives on bus 10 at the data input of a code #1 modulator/transmitter 12. This digital data stream will be divided into individual symbols transmitted at the rate of three symbols/frame in the preferred embodiment. The teachings of the invention can be employed using symbols, data bytes or any other grouping of digital data. The first bit from the stream on bus 10 will be the first vector element in the information vector \mathbf{v}_b . For the sake of simplicity, the manner in which symbols are formed from the incoming data stream will not be described here, but will be described in greater depth below herein. In the preferred embodiment, symbols are formed by filling individual address locations in a framer memory (not shown) with 9 bit bytes which arrive one per timeslot. The individual data streams on buses 10

and 14 are TDMA streams divided into multiple successive timeslots. Thus, time increases along one axis of the framer memory. Symbols are formed by reading the memory "across time", i.e., along an axis orthogonal to the axis of increasing time. *Col. 7, line 61 – col. 8, line 17 (emphasis added)*.

Further, as may be seen in the discussion of Figure 55, and in particular the discussion of element 1018, the RF up/down converter "translates the frequency" in order to avoid interference. To the contrary, the present invention utilizes a RF splitter and modulator in order to accommodate IP and non-IP signals.

Accordingly, Applicant respectfully submits at least those portions of the Fuhrman reference cited in this and the previous Office Action fail to teach, or suggest, that single frequency carrier RF signals are modulated using IP digital data using a RF splitter and modulator, at least because Fuhrman explicitly teaches the use of TDMA streams and frequency translation, for example.

Wherefore, Applicant respectfully submits the cited reference fails to teach or suggest at least each of the limitations of amended Claim 1, and hence fails to anticipate it. Accordingly, Applicant respectfully requests reconsideration and removal of at least this rejection to Claim 1.

Claim 2

Applicant has amended Claim 2, to include “said at least one intelligent device including an RF splitter suitable for receiving said modulated single frequency RF signal into at least an IP signal portion and the non-IP RF modulated signal, and at least one demodulator electrically connected to said RF splitter and suitable for demodulating at least the IP signal portion split by said RF splitter.”

Further, Applicant has previously amended Claim 2 to recite, in part, “wherein said single frequency RF signals comprise IP digital information.” Accordingly, Applicant respectfully deems the rejection to Claim 2 overcome for at least those reasons set forth with regard to Claim 1.

Wherefore, Applicant respectfully submits the cited reference fails to teach or suggest at least each of the limitations of amended Claim 2, and hence fails to anticipate it. Accordingly, Applicant respectfully requests reconsideration and removal of at least this rejection to Claim 2 as well.

Claims 3 - 5

Claim 3 has been amended in part to recite, “said at least one intelligent device including an RF splitter suitable for distributing said modulated single frequency RF signal into at least an IP signal portion and the non-IP RF modulated signal, and at least one modulator electrically connected to said RF splitter and suitable for modulating at least the IP signal portion split by said RF splitter.” Claim 4 has been amended in part to recite, “said at least one intelligent device including an RF splitter suitable for

distributing said modulated single frequency RF signal into at least an IP signal portion and the non-IP RF modulated signal, and at least one modulator electrically connected to said RF splitter and suitable for modulating at least the IP signal portion split by said RF splitter.” And, Claim 5 has been amended in part to recite “said at least one intelligent device including an RF splitter suitable for receiving said modulated single frequency RF signal into at least an IP signal portion and the non-IP RF modulated signal, and at least one demodulator electrically connected to said RF splitter and suitable for demodulating at least the IP signal portion split by said RF splitter.”

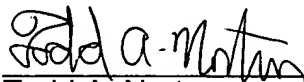
Accordingly, Applicant respectfully deems the rejections to Claims 3 - 5 overcome for at least those reasons set forth with regard to Claims 1 and 2.

Wherefore, Applicant respectfully submits the cited reference fails to teach or suggest at least each of the limitations of each of amended Claims 3 - 5, and hence fails to anticipate them as well. Accordingly, Applicant respectfully requests reconsideration and removal of at least this rejection to Claims 3 - 5.

CONCLUSION

In summation, Applicant respectfully submits that all of the claims presently appearing in this application are in condition for allowance, early notification of which is earnestly solicited. Should there be any questions or other matters whose resolution may be advanced by a telephone call, the Examiner is cordially invited to contact Applicant's undersigned attorney at his number listed below.

Respectfully submitted,



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